

C ALPHA-COPAENE

Chemid

ALPHACOPAENE

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Achillea millefolium	Leaf	--	--		--
Acinos alpinus	Shoot	4.5	4.5	-0.2960814941369321	Velasco-Negueruela,A., Perez-Alonso,M.J., Jiminez,S.M. and Garcia,F.M. 1993. The Volatile Constituents of Acinus alpinus (L.) Moench ssp. meridionalis (Nyman). P.W. Ball Growing in Spain. Flav. & Frag. J. 8:127-130.)
Acinos alpinus	Shoot	--	4.5	-0.2960814941369321	Velasco-Negueruela,A., Perez-Alonso,M.J., Jiminez,S.M. and Garcia,F.M. 1993. The Volatile Constituents of Acinus alpinus (L.) Moench ssp. meridionalis (Nyman). P.W. Ball Growing in Spain. Flav. & Frag. J. 8:127-130.)
Alpinia galanga	Rhizome	--	--		--
Angelica archangelica	Root	10	190		--
Angelica archangelica	Root Essent. Oil	--	--		--
Artemisia annua	Plant	4	620	2.6088478815042415	--
Artemisia capillaris	Essential Oil	--	--		--
Artemisia herba-alba	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Artemisia salsolooides	Shoot	500	500	5.387619552329427	V. Kaul, P. Weyerstahl, H. Wahlberg, H. Marschall, (1992); Volatile constituents of the essential oil and the absolute of Artemisia salsolooides Willd. from Ladakh, Flavour and Fragrance journal, Vol.7, 299-305.
Boswellia sacra	Essential Oil	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Calamintha nepeta	Leaf	25	25	-0.20757155613371883	Akgul, A., De Pooter, H.L., and De Buyck, L.F. 1991. The Essential Oils of Calamintha nepeta subsp. glandulosa and Ziziphora clinopodioides from Turkey. J. Ess. Oil Res., 3: 7-10.
Callicarpa americana	Leaf	--	2	-0.3444107788177234	--
Capsicum annuum	Fruit	--	--		--
Carthamus tinctorius	Flower	0.17	0.22	-0.8722153075099439	--
Carthamus tinctorius	Leaf	0.05	0.05	-0.3560123650887585	--
Centella asiatica	Essential Oil	--	9000	-0.36082830563118673	Jim Duke's personal files.
Chamaemelum nobile	Plant	--	--		--
Chrysanthemum parthenium	Shoot	--	--		Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
Chrysanthemum x morifolium	Plant	2	5	-0.5147605038264476	Wealth of India.
Citrus limon	Essential Oil	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus limon	Petiole	--	0		--
Citrus paradisi	Pericarp	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Citrus reticulata	Fruit	1	2	-0.6867645101915246	--
Citrus sinensis	Pericarp	--	--		--
Citrus sinensis	Pericarp Essent. Oil	--	--		Jim Duke's personal files.
Citrus sinensis	Fruit	0.7	1	-0.6881248888845418	--
Cleonia lusitanica	Leaf	1	1	-0.35036031023876707	Perez-Alonso, M., Velasco-Negueruela, A., and Lopez-Saez, A. 1991. The Essential Oil of Cleonia lusitanica. J. Ess. Oil Res., 3: 441-442.
Coleus barbatus	Root Essent. Oil	--	5000	-1	Jim Duke's personal files.
Commiphora myrrha	Resin, Exudate, Sap	--	--		Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)
Copaifera spp	Wood	--	--		--
Croton eluteria	Bark	--	--		--
Croton lechleri	Plant	--	--		Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Elettaria cardamomum	Seed	--	--		--
Eucalyptus angulosa	Leaf	--	15	-0.2670668703441556	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus behriana	Leaf	2.7	2.7	-0.3402461068229929	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subjenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus brassiana	Leaf	--	0	-0.3563098416598108	Singh, A. K., Gupta, K. C., & Brophy, J. J. 1991. Chemical Constituents of the Leaf Essential Oil of Eucalyptus brassiana S. T. Blake. Journal of Essential Oil Res. 3: 45-7.
Eucalyptus ceratocorys	Leaf	--	36	-0.14212671050223838	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria,Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus cuprea	Leaf	23	23	-0.2194706189758062	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus desquamata	Leaf	75	75	0.08990501491846502	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus dolichorhyncha	Leaf	--	60	0.0006620436028098569	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria,Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus erythrandra	Leaf	--	33	-0.15997530476536942	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria,Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus fasiculosa	Leaf	0	1.3	-0.3485754508124539	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus forrestiana	Leaf	--	195	0.8038487854437062	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus globulus	Leaf Essent. Oil	--	2000	1	--
Eucalyptus incrassata	Leaf	--	65	0.03040970070802824	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus intertexta	Leaf	5.5	5.5	-0.32358741884407055	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subjenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus lansdowneana	Leaf	2.4	2.4	-0.3420309662493059	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subjenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus largisparsa	Leaf	20	20	-0.23731921323893723	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subjenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus leucoxylon	Leaf	45	45	-0.0885809277128453	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subjenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Eucalyptus melanophloia</i>	Leaf	7	7	-0.31466312171250505	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus nova-anglica</i>	Leaf	11	20	-0.23731921323893723	Brophy, J. L., Lassak, E. V., & Boland, D. J. 1992. The Leaf Essential Oils of <i>Eucalyptus nova-anglica</i> . Deane & Maiden. Journal of Essential Oil Res. 4: 29-32.
<i>Eucalyptus ochrophloia</i>	Leaf	2	2	-0.3444107788177234	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus odorata</i>	Leaf	33	33	-0.15997530476536942	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus populnea</i>	Leaf	1.8	1.8	-0.3456006851019321	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus porosa</i>	Leaf	10	10	-0.296814527449374	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus sparsa</i>	Leaf	25	25	-0.20757155613371883	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus stoatei	Leaf	--	140	0.47662455728630404	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus tetraptera	Leaf	--	20	-0.23731921323893723	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus.Part I.Subgenus Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus viridis	Leaf	1	1	-0.35036031023876707	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Humulus lupulus	Fruit	15	15	-0.6690795871823009	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hyptis suaveolens	Shoot	1.5	1.5	-0.3304934076372329	Mallavarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of Hyptis suaveolens (L.) Poit. J. Ess. Oil Res. 5: 321.
Hyptis suaveolens	Shoot	--	1.5	-0.3304934076372329	Mallavarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of Hyptis suaveolens (L.) Poit. J. Ess. Oil Res. 5: 321.
Illicium verum	Fruit	25	1100	0.8069312947413789	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Juniperus communis	Fruit	3	33	-0.6445927707079909	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Juniperus communis	Fruit Essent. Oil	--	--	--	--
Lantana camara	Shoot	--	14	-0.18711043471931266	--
Laurus nobilis	Plant	--	--	--	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Leonotis leonurus</i>	Se	6	6		Pedro, L.G., Barroso, J.G., Marques, N.T., Ascensao, L., Pais, M.S.S. and Scheffer, J.J.C. 1991. Composition of the Essential Oil from Sepals of <i>Leonotis leonurus</i> R. Br. J. Ess. Oil Res. 3: 451-3
<i>Leptospermum scoparium</i>	Essential Oil	--	--	--	--
<i>Magnolia denudata</i>	Bark	--	--	--	--
<i>Magnolia denudata</i>	Bulb	--	--	--	--
<i>Magnolia denudata</i>	Flower	--	--	--	--
<i>Magnolia denudata</i>	Leaf	--	--	--	--
<i>Magnolia denudata</i>	Twig	--	--	--	--
<i>Melaleuca alternifolia</i>	Leaf	10	25	-0.20757155613371883	--
<i>Melaleuca alternifolia</i>	Essential Oil	--	1700	-0.549784304993286	--
<i>Melia azedarach</i>	Wood	--	--	--	--
<i>Melissa officinalis</i>	Shoot	2	120	1.0287771756246513	--
<i>Mentha aquatica</i>	Shoot	2	2	-0.3247580887205161	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.
<i>Mentha aquatica</i>	Shoot	--	2	-0.3247580887205161	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.
<i>Mentha aquatica</i>	Shoot	--	2	-0.3247580887205161	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Mentha aquatica	Shoot	--	2	-0.3247580887205161	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. <i>Nippon Nogeikagaku Kaishi</i> 67(10): 1417-1419.
Mentha aquatica	Shoot	--	2	-0.3247580887205161	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. <i>Nippon Nogeikagaku Kaishi</i> 67(10): 1417-1419.
Mentha x piperita	Essential Oil	--	--	--	
Metrosideros sclerocarpa	Leaf	7	28	-0.18972296187058782	--
Micromeria myrtifolia	Shoot	7	7	-0.267404899553348	Ozek, T., Kirimer, N., and Baser, K.H.C. 1992. Composition of the Essential Oil of <i>Micromeria myrtifolia</i> Boiss. et Hohen. <i>J. Ess. Oil Res.</i> , 4: 79-80.
Micromeria varia	Shoot	45	45	0.16847933811712973	Pedro, L.G., et al. 1995. Composition of the Essential oil of <i>Micromeria varia</i> Benth. ssp. <i>thymoides</i> (Sol. ex Lowe) Perez var. <i>thymoides</i> , and endemic species of the Madeira Archipelago. <i>flav. & Fragr. J.</i> 10(3): 199-202.
Micromeria varia	Shoot	--	45	0.16847933811712973	--
Monarda didyma	Flower	--	--		Flavour and Fragrance Journal, 6: 80.
Monarda didyma	Leaf	--	--		Flavour and Fragrance Journal, 6: 80.
Murraya koenigii	Leaf	--	0.1	-0.35571488851770644	--
Myristica fragrans	Essential Oil	--	3000	-0.5161346064767478	--
Myroxylon balsamum	Plant	--	--		--
Nepeta racemosa	Shoot	11	11	-0.22152234821961353	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of <i>Nepeta racemosa</i> Lam. <i>J. Ess. Oil Res.</i> 5: 215-7.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Nepeta racemosa</i>	Shoot	--	11	-0.22152234821961353	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of <i>Nepeta racemosa</i> Lam. J. Ess. Oil Res. 5: 215-7.
<i>Ocimum basilicum</i>	Plant	0.8	20	-0.43857493345252835	--
<i>Ocimum basilicum</i>	Plant	--	0.8	-0.5360924635311449	Die Nahrung. Pino, J., Rosado, A., Goire, I., Roncal, E., and Garcia, I. 1993. Analysis of the Essential Oil from Cuban Basil. Die Nahrung 37:(5): 501-504.
<i>Ocimum basilicum</i>	Shoot Essent. Oil	300	3600	-1	--
<i>Ocimum gratissimum</i>	Flower	100	170	1.6993695654437464	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
<i>Ocimum gratissimum</i>	Leaf	50	95	0.20889564333933855	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
<i>Opopanax chironium</i>	Essential Oil	--	--	--	--
<i>Origanum majorana</i>	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Origanum majorana</i>	Essential Oil	--	--	--	--
<i>Origanum vulgare</i>	Plant	18	90	-0.0830422717075718	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Panax ginseng</i>	Flower Essent. Oil	--	--	--	--
<i>Panax ginseng</i>	Shoot Essent. Oil	--	--	--	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pelargonium citrosum	Shoot	--	6	-0.2788755373867816	Matsuda, B. M., et al. 1996. Essential Oil Analysis and Field Evaluation of the Citrosa Plant 'Pelargonium citrosum' as a Repellent Against Populations of Aedes Mosquitoes. J. Am. Mosq. Contr. Assoc. 12(1):69-74.
Perilla frutescens	Shoot Essent. Oil	--	12000	1	Nguyen, X. D., La, D. M., Lu'u, D. C., Leclercq, P. A. 1995. Essential Oil Constituents from the Aerial Parts of Perilla frutescens (L.) Britton. J. Essent. Oil Res., 7(4): 429-432.
Petroselinum crispum	Leaf	7.92	7.92	-0.30918955280514493	--
Pilocarpus microphyllus	Leaf	75	285	1.3393066133376372	--
Pimenta dioica	Leaf Essent. Oil	--	--	--	
Pimenta racemosa	Leaf	0	70	0.060157357813246624	--
Pinus sylvestris	Wood	--	--	--	
Pinus sylvestris	Essential Oil	--	--	--	
Pinus sylvestris	Leaf Essent. Oil	--	500	-1	--
Piper auritum	Leaf	--	--		Tramil
Piper nigrum	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Piper nigrum	Fruit Essent. Oil	8200	15800	1	--
Plectranthus barbatus	Essential Oil	7000	100000	1.9946505905264882	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Plectranthus incanus	Shoot	25	25	-0.06093341855154284	Shah, G.C., Bhandari, R. & Mathela, C.S. 1992. 1,2-Epoxy-p-Menthane Derivatives from some Labiate Species. J. Ess. Oil Res. 4: 57-59.
Ptychopetalum olacoides	Root Essent. Oil	--	32000	1	Uber Bucek, E., Fournier, G., Dadoun, H. 1987. Volatile Constituents of Ptychopetalum olacoides Root Oil. Planta Med. 53, 2: 231.
Rheum palmatum	Rhizome	--	50		--
Rosmarinus officinalis	Leaf	2	2	-0.3444107788177234	Soliman, F.M., El-Kashoury, M.M., Fathy, M.M. and Gonaid, M.H. 1994. Analysis and Biological Activity of the Essential Oil of Rosmarinus officinalis L. from Egypt. Flavour and Fragrance J. 9: 29-33.
Rosmarinus officinalis	Leaf	--	4	-0.33251171597563606	Soliman, F.M., El-Kashoury, M.M., Fathy, M.M. and Gonaid, M.H. 1994. Analysis and Biological Activity of the Essential Oil of Rosmarinus officinalis L. from Egypt. Flavour and Fragrance J. 9: 29-33.
Rosmarinus officinalis	Leaf	--	2	-0.3444107788177234	Soliman, F.M., El-Kashoury, M.M., Fathy, M.M. and Gonaid, M.H. 1994. Analysis and Biological Activity of the Essential Oil of Rosmarinus officinalis L. from Egypt. Flavour and Fragrance J. 9: 29-33.
Rosmarinus officinalis	Resin, Exudate, Sap	--	--		--
Salvia dorisiana	Shoot	1.4	1.6	-0.3293463438538896	Tucker, A.O. & Maciarello, M.J. 1994. The Essential Oil of Salvia dorisiana Standley. J. Ess. Oil Res. 6: 97-8.
Salvia gilliesii	Shoot	41	41	0.12259678678339525	Velasco-Negueruela, A. et al. 1993. The Essential Oil of Salvia gilliesii Benth. J. Ess. Oil Res. 5: 319-320.
Salvia officinalis	Leaf Essent. Oil	--	--		--
Sassafras albidum	Leaf	--	0	-0.3563098416598108	--
Satureja cilicica	Shoot	3	3	-0.3132874508870825	Tumen, G. Baser, K.H.C. and Kirimer, N. 1993. The Essential Oil of Satureja cilicica P.H. Davis. J. Ess. Oil Res. 5: 547-548.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Satureja montana	Plant	3	85	-0.10843746183221153	--
Satureja subspicata	Plant	15	15	-0.4639701235771681	Stanic, G., Petricic, J., and Blazevic, N. 1991. Gas Chromatographic Investigations of Essential Oils of <i>Satureja montana</i> and <i>Satureja subspicata</i> from Yugoslavia. <i>J. Ess. Oil Res.</i> , 3: 153-158.
Sideritis athoa	Shoot	7	7	-0.267404899553348	Ozek, T., Baser, K.H.C. and Tumen, G. 1993. The Essential Oil of <i>Sideritis athoa</i> Papanikolaou Et Kokkini. <i>J. Ess. Oil Res.</i> 5: 669-670.
Sideritis germanicolpitana	Plant	4	15	-0.4639701235771681	<i>J. Essential Oil</i> , 4: 533.
Sideritis mugronensis	Flower	10	35	-0.34541755817946124	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of <i>Sideritis mugronensis</i> Flower and Leaf. <i>J. Ess. Oil Res.</i> , 3: 395-397.
Sideritis mugronensis	Leaf	5	15	-0.2670668703441556	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of <i>Sideritis mugronensis</i> Flower and Leaf. <i>J. Ess. Oil Res.</i> , 3: 395-397.
Sideritis pauli	Shoot	95	95	0.7420112297888107	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of <i>Sideritis pauli</i> Pau. <i>FFJ7</i> : 47-8. 1992.
Stevia rebaudiana	Flower	--	26	-0.48173669975434175	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Stevia rebaudiana	Leaf	--	1	-0.35036031023876707	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Syzygium aromaticum	Flower	--	--	--	
Syzygium aromaticum	Fruit	--	1890	1.8816304622249802	--
Syzygium aromaticum	Leaf	--	1135	6.3964083212247616	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
Tagetes lucida	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor & Fragrance</i> , 12(1): 47-52.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Tagetes minuta</i>	Essential Oil	--	1000	-0.5679033734252681	--
<i>Tamarindus indica</i>	Fruit Essent. Oil	--	6000	-1	--
<i>Tanacetum parthenium</i>	Shoot	--	--		Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
<i>Teucrium asiaticum</i>	Shoot	1.75	1.75	-0.3276257481788745	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.
<i>Teucrium cyprium</i>	Leaf	65	65	0.03040970070802824	Arnold, N., Bellomaria, B., Valentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. J. Ethnopharm. 35: 105-113.
<i>Teucrium divaricatum</i>	Leaf	21	21	-0.23136968181789355	Arnold, N., Bellomaria, B., Valentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. J. Ethnopharm. 35: 105-113.
<i>Teucrium gnaphalodes</i>	Shoot	2.5	2.5	-0.3190227698037993	Perez-Alonso, M.J. Velasco-Negueruela, A. and Lopez-Saez, J.A. 1993. The Essential Oils of Two Iberian <i>Teucrium</i> Species. J. Ess. Oil Res. 5: 397-402.
<i>Teucrium kotschyanum</i>	Leaf	160	160	0.5956151857071775	Arnold, N., Bellomaria, B., Valentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. J. Ethnopharm. 35: 105-113.
<i>Teucrium micropodioides</i>	Leaf	32	32	-0.1659248361864131	Arnold, N., Bellomaria, B., Valentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. J. Ethnopharm. 35: 105-113.
<i>Teucrium oxylepis</i>	Shoot	3.31	3.31	-0.30973155315871803	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Teucrium oxylepis</i>	Shoot	4.8	4.8	-0.292640302786902	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium polium</i>	Shoot	1.5	1.5	-0.3304934076372329	Perez-Alonso, M.J. Velasco-Negueruela, A. and Lopez-Saez, J.A. 1993. The Essential Oils of Two Iberian <i>Teucrium</i> Species. <i>J. Ess. Oil Res.</i> 5: 397-402.
<i>Teucrium pseudoscorodonia</i>	Shoot	1.8	1.8	-0.3270522162872029	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium salviastrum</i>	Shoot	1.27	1.27	-0.3331316543389227	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium scorodonia</i>	Shoot	4.77	4.77	-0.29298442192190505	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Thymus riatarum</i>	Shoot	25	25	-0.06093341855154284	Iglesias, J., Vila, R., Canigueral, S., Bellakdhar, and II Idrissi, A. 1991. Analysis of the Essential Oil of <i>Thymus riatarum</i> . <i>J. Ess. Oil Res.</i> 3: 43-4.
<i>Turnera diffusa</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Zea mays</i>	Leaf	--	--		--
<i>Zingiber officinale</i>	Rhizome	--	--		--
<i>Zingiber officinale</i>	Rhizome Essent. Oil	--	--		--